### REMARKS/ARGUMENTS

## The Invention

The invention relates to a sensor that uses liquid samples from fluids such as blood, urine and milk and measures the partial pressure of carbon dioxide as vapor in fluid communication with the liquid sample and generated by an enzymatic reaction, which pressure is related to concentration of a component, such as urea, in the fluid.

## Status of the Claims

Claims 11-20 are pending in this application.

Claims 12 and 19 are rejected under 35. U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 11 and 12 are rejected under 35. U.S.C. §102(b) as allegedly being anticipated by U.S. 4,073,694 or U.S. 4,440,620, or Oehler, *et al.* 

Claims 13, and 17-20 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. 4,440,620 taken with Gonda, *et al.* 

Claims 13, 14, and 16-20 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Fuhrmann, *et al.* in view of Gonda, *et al.* Claim 15 is objected to as being based on a rejected base claim.

#### Support for Amendments to the Claims

Support for the amendment to claim 11 is found in claim 13, and original claim 15. No new matter is added.

Support for the amendment to claim 12 is found in the specification on page 4, lines 25-31, wherein it is stated that "...dehydrogenases generate carbon dioxide...assess uric acid using uricase... or urate oxidase...", and on page 5, line 4 wherein it is stated that "the hydrolysis of urea, such as by urease...". No new matter is added.

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Support for the amendment to claim 13 is found in original claim 15, which is now cancelled. No new matter is added.

Support for the amendment to claim 19 is found in the specification on page 4, lines 19-20 wherein it is stated that the invention "can repeatedly measure MUN to within 1 mg/dl...". No new matter is added.

## Allowable Subject Matter

The Examiner has indicated that claim 15 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Response to Claim Rejections

The Examiner has indicated that the embodiment of the invention recited in original claim 15, wherein carbon dioxide is detected as a partial pressure, is allowable subject matter. Therefore, claim 11 and claim 13 have been amended to include this limitation, and claim 15 has been cancelled.

#### Response to Claim Rejections Under 35 U.S.C. §112

Claims 12 and 19 are rejected under 35. U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 has been amended to recite "the enzymatically catalyzed process", which has antecedent basis.

Claim 19 has been amended to recite "measured within..." in place of "prediction error". The Examiner alleged that the term "prediction error" is not a term of art, the amendment clarifys the meaning of the claim.

## Response to Claim Rejections Under 35 U.S.C. §102(b)

Claims 11 and 12 are rejected under 35. U.S.C. §102(b) as allegedly being anticipated by U.S. 4,073,694 or U.S. 4,440,620, or Oehler, *et al.* Claims 11 and 12 have been amended to recite that the equilibrium between carbonate ion and carbon dioxide is shifted to

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carbon dioxide, and the carbon dioxide is detected as a partial pressure. None of the references recite each and every element of the claims. Therefore, reconsideration of the rejection is respectfully requested.

# Response to Claim Rejections Under 35 U.S.C. §103

Claims 17-20 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. 4,440,620 taken with Gonda, *et al.* Claims 17-20 are dependent on claim 13, which has been amended to recite patentable subject matter.

Claims 16-20 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Fuhrmann, *et al.* in view of Gonda, *et al.* Claims 16-20 are dependent on claim 13, which has been amended to recite patentable subject matter.

## CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,

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